

Section A

Multiple Choice Questions (MCQ's)

Q-01: Choose the correct answer for each from the given option.

- (i) if "b" is a real number, the point (0,b) lies in/on
 (a) 2nd quadrant (b) 3rd quadrant (c) x - axis (d) y - axis
- (ii) $x + 4 = y$ and $y = 6 \Rightarrow x + 4 = 6$, this properties is called
 (a) Reflexive property (b) Symmetric property
 (c) Transitive property (d) Additive property
- (iii) Total number of digits in 2^{25} are.....
 (a) 8 (b) 9 (c) 10 (d) 11
- (iv) The degree of the polynomial $x^2 + xy^2 + y$ is
 (a) 1 (b) 2 (c) 3 (d) 4
- (v) L.C.M of $x^3 + 8$ and $x + 2$ is
 (a) $x^2 + 2x + 4$ (b) $x^3 - 8$ (c) $x^3 + 8$ (d) $x^4 + 16$
- (vi) If $a + b = 2$ and $a - b = 2$, then the value of $a^2 + b^2$ is
 (a) 2 (b) $3/2$ (c) -1 (d) 4
- (vii) The method of obtaining a relation independent of any particular variable is called
 (a) Rationalization (b) Addition (c) Elimination (d) Equation
- (viii) if $A = \begin{vmatrix} a & b \\ c & d \end{vmatrix}$, then $ad - bc$ is called Of matrix A.
 (a) Conjugate (b) Determinent (c) Transpose (d) None
- (ix) The solution set of the simultaneous equation $x + y = 5$ and $2x - y = 7$ is
 (a) $\{4, 1\}$ (b) $\{(1, 4)\}$ (c) $\{4, 1\}$ (d) $\{2, 3\}$
- (x) if q, p, r are in continued proportion, then
 (a) $P^2 = q^2 r^2$ (b) $P^2 = (qr)^2$ (c) $P = q^2 r^2$ (d) $P^2 = qr$
- (xi) Sum of 10 observations is 125, the mean is
 (a) 12.5 (b) 1.25 (c) 1250 (d) None
- (xii) The angles whose arms form two pairs of opposite rays are called.....
 (a) Supplementary angles (b) Complementary angles
 (c) Vertically opposite angles (d) Adjacent angles
- (xiii) is the point of concurrency of the medians of a triangle.
 (a) Centriod (b) E-Centre (c) Orthocentre (d) In-centre
- (xiv) If the corresponding angles of two polygons are congruent then their corresponding sides are.....
 (a) Congruent (b) Equal (c) Proportional (d) None
- (xv) If $r = \{(a,b), (C,d), (e,f)\}$, then Range R =
 (a) $\{a,b,c\}$ (b) $\{b,d,f\}$ (c) $\{a,c,e\}$ (d) $\{d,e,f\}$
- (xvi) From a point outside the circle tangent can be drawn to the circle.
 (a) 1 (b) 2 (c) 3 (d) None
- (xvii) If $(x - 1)(x + 3) = 0$, then $x =$
 (a) 1, 3 (b) -1, -3 (c) -1, 3 (d) 1, -3
- (xviii) If $a:b = c:d$, then $a:c = b:d$ this property of proportion is called
 (a) Dividendo (b) Alternendo
 (c) Invertendo (d) Componendo

(xix) Which of the following statement is not true.

- (a) $\cos 10^\circ = \sin 80^\circ$ (b) $\tan 30^\circ = \cot 60^\circ$
 (c) $\sec 35^\circ = \operatorname{cosec} 65^\circ$ (d) $\tan 30^\circ = 1/\cot 30^\circ$

(xx) $\operatorname{Cosec}(90^\circ - \theta) =$

- (a) $\sin \theta$ (b) $\cos \theta$ (c) $\sec \theta$ (d) None